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ARIZONA CORPORATION COMMISSION

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ARIZONA CORPORATION COMMISSION
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TO ALL PARTIES:

Enclosed please find the recommendation of Administrative Law Judge Teena Jibilian. The recommendation has been filed in the form of an Opinion and Order on:

MOHAVE ELECTRIC COOPERATIVE, INC.
(REHEARING OF DECISION NO. 72500)

Pursuant to A.A.C. R14-3-110(B), you may file exceptions to the recommendation of the Administrative Law Judge by filing an original and thirteen (13) copies of the exceptions with the Commission's Docket Control at the address listed below by 4:00 p.m. on or before:

JUNE 7, 2012

The enclosed is NOT an order of the Commission, but a recommendation of the Administrative Law Judge to the Commissioners. Consideration of this matter has tentatively been scheduled for the Commission's Open Meeting to be held on:

JUNE 19, 2012 and JUNE 20, 2012

For more information, you may contact Docket Control at (602) 542-3477 or the Hearing Division at (602) 542-4250. For information about the Open Meeting, contact the Executive Director's Office at (602) 542-3931.

Arizona Corporation Commission

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1 **BEFORE THE ARIZONA CORPORATION COMMISSION**

2 **COMMISSIONERS**

3 GARY PIERCE - Chairman
4 BOB STUMP
5 SANDRA D. KENNEDY
6 PAUL NEWMAN
7 BRENDA BURNS

8 IN THE MATTER OF THE APPLICATION OF
9 MOHAVE ELECTRIC COOPERATIVE, INC.
10 FOR APPROVAL OF A WASTE-TO-ENERGY
11 FACILITY AS A PILOT PROGRAM UNDER
12 THE RENEWABLE ENERGY RULES OR, IN
13 THE ALTERNATIVE, FOR A LIMITED
14 WAIVER.

DOCKET NO. E-01750A-10-0453

DECISION NO. _____

OPINION AND ORDER
ON REHEARING

11 DATES OF REHEARING: November 28, (Public Comment), November 29, 30,
12 and December 1, 2011

13 PLACE OF REHEARING: Phoenix, Arizona

14 ADMINISTRATIVE LAW JUDGE: Teena Jibilian

15 APPEARANCES: Mr. William P. Sullivan, CURTIS, GOODWIN,
16 SULLIVAN, UDALL & SCHWAB, on behalf of
17 Applicant;

18 Mr. Timothy M. Hogan, ARIZONA CENTER FOR
19 LAW IN THE PUBLIC INTEREST, on behalf of the
20 Sierra Club - Grand Canyon Chapter; and

21 Mr. Scott Hesla and Mr. Wesley Van Cleve, Staff
22 Attorneys, Legal Division, on behalf of the Utilities
23 Division of the Arizona Corporation Commission.

24 **BY THE COMMISSION:**

25 **I. INTRODUCTION**

26 **A. Application**

27 The Renewable Energy Standard and Tariff ("REST") Rules are codified at Arizona
28 Administrative Code ("A.A.C.") Title 14, Chapter 2, Article 18.¹ The REST Rules detail the Annual
Renewable Energy Requirement² that each Affected Utility³ must satisfy and also prescribes the

¹ See A.A.C. R14-2-1801, *et seq.*

² See A.A.C. R14-2-1804.

³ See A.A.C. R14-2-1801.A: ("Affected Utility" means a public service corporation serving retail electric load in Arizona, but excluding any Utility Distribution Company with more than half of its customers located outside of Arizona.").

1 Eligible Renewable Energy Resources⁴ that may be used to meet the Annual Renewable Energy
2 Requirement.

3 On November 5, 2010, Mohave Electric Cooperative, Inc. ("Mohave"), filed with the Arizona
4 Corporation Commission ("Commission") an application for approval of a waste-to-energy ("WTE")
5 facility as a pilot program under the REST Rules or, in the alternative, for a limited waiver
6 ("Application"). The Application requests that the Commission either (1) recognize energy produced
7 at a single WTE facility owned, operated or developed by Reclamation Power Group, LLC ("RPG")
8 as a pilot program pursuant to A.A.C. R14-2-1802.D, or (2) grant a waiver, pursuant to A.A.C. R14-
9 2-1816.A, to the extent necessary to recognize the energy produced at this WTE facility as an
10 Eligible Renewable Energy Resource as defined by A.A.C. R14-2-1802. Under either scenario,
11 Mohave is seeking to have output from the facility deemed eligible to qualify for Renewable Energy
12 Credits ("RECs") under A.A.C. R14-2-1804.

13 Intervention was granted to the Sierra Club - Grand Canyon Chapter ("Sierra Club") and
14 Solomon Industries LLC ("Solomon").

15 **B. Decision No. 72500**

16 On July 25, 2011, the Commission issued Decision No. 72500 approving the Company's
17 request that energy produced at the RPG WTE facility by combustion of municipal solid waste
18 ("MSW") be recognized as a pilot program pursuant to A.A.C. R14-2-1802.D. Decision No. 72500
19 orders that 90 percent of the total kilowatt-hours ("kWhs") of energy from the RPG WTE facility be
20 considered as being produced by an Eligible Renewable Energy Resource at this time. Further,
21 Decision No. 72500 orders Mohave to file reports on a semi-annual basis with accurate and timely
22 information relating to the percent of energy generated by the RPG WTE facility from biogenic
23 material, and the MSW categorical composition breakdowns. Decision No. 72500 directs Staff to
24 review the information provided in the reports relating to the percent of energy generated by the RPG
25 WTE facility from biogenic material and, in the event Staff believes that less than 85 percent of the
26 energy produced at the RPG WTE facility is from biogenic sources, to file a recommendation with
27

28 ⁴See A.A.C. R14-2-1802.A.

1 the Commission to reduce the allowable percentage of RECs from the RPG WTE facility. Decision
2 No. 72500 also provides that Mohave may apply to the Commission to increase the allowable
3 percentage of RECs from the RPG WTE facility, if Mohave believes the amount of energy produced
4 by biogenic sources at the RPG WTE facility exceeds 95 percent.

5 **C. Rehearing Proceeding**

6 On August 12, 2011, Sierra Club filed an Application for Rehearing of Decision No. 72500.

7 On August 23, 2011, Mohave filed its Response to the Application for Rehearing and
8 Alternative Request for A.R.S. § 40-252 Proceeding.

9 On August 24, 2011, at an Open Meeting of the Commission, the Commission granted Sierra
10 Club's Application for Rehearing.

11 On August 26, 2011, a Procedural Order was issued setting a procedural conference for the
12 purpose of scheduling a rehearing proceeding.

13 On August 31, 2011, the procedural conference convened as scheduled. Sierra Club, Mohave
14 and Staff appeared through counsel and discussed procedural issues regarding the rehearing.
15 Solomon did not appear.⁵

16 On September 13, 2011, a Procedural Order Setting Rehearing was issued, setting the
17 rehearing schedule, including publication of notice and the schedule for prefilings of witness
18 testimony.

19 The rehearing was conducted on November 28, 29, and 30, and December 1, 2011. Public
20 comment was taken on November 28, 2011, and the evidentiary portion of the rehearing proceeding
21 commenced on November 29, 2011. Sierra Club presented the testimony of three witnesses, Mohave
22 presented the testimony of five witnesses, and Staff presented the testimony of one witness. Counsel
23 for all parties indicated that they were provided a full and fair opportunity to present their respective
24 cases.⁶ Following the parties' submission of Initial Post-Rehearing Briefs and Post-Rehearing Reply
25 Briefs, the matter was taken under advisement pending the submission of a Recommended Opinion
26 and Order on Rehearing to the Commission.

27 ⁵ Counsel for Mohave stated that it had received communication from Solomon that Solomon did not intend to participate
28 in the rehearing proceeding.

⁶ Rehearing Transcript ("Rhg. Tr.") at 515-16.

1 **II. DISPUTED ISSUES RAISED ON REHEARING**

2 Sierra Club takes the position that Decision No. 72500 should be amended to deny the
3 Application, arguing that the RPG WTE facility should neither be designated as a pilot program nor
4 be granted a waiver. Sierra Club also urges that if the RPG WTE facility is approved as a pilot
5 program or if a waiver is granted, that the percent of kWh production output deemed eligible for
6 RECs by Decision No. 72500 be adjusted downward, and should not exceed the 75 percent
7 recommended by Staff.

8 Mohave requests that Decision No. 72500 be affirmed.

9 Staff continues to recommend that Mohave be granted a waiver, and that 75 percent of the
10 energy produced at the RPG WTE facility be deemed eligible for RECs. In the alternative, Staff
11 recommends that Decision No. 72500 should be affirmed in its entirety, and acknowledges that the
12 Decision is properly supported by the record.

13 The parties were instructed to file post-hearing briefs on all issues they wished the
14 Commission to consider. The parties' briefed positions on the disputed issues are set forth below.

15 **A. Whether Electricity Produced by the RPG WTE Facility Qualifies for a Waiver**
16 **from the REST Rules Requirements**

17 Staff recommends that the Commission grant a waiver of A.A.C. R14-2-1802.A in order to
18 recognize the RPG WTE facility as an Eligible Renewable Energy Resource on an experimental basis
19 such that the energy produced at the facility would qualify for RECs and be eligible to satisfy annual
20 renewable energy requirements.⁷ Staff states that there appear to be many potential benefits and
21 some potential consequences associated with the use of WTE technology. At this point in time, with
22 the data presently available, Staff believes that the potential benefits outweigh the potential
23 consequences, especially when compared to the alternative of landfilling MSW.⁸

24 Sierra Club contends that good cause has not been shown for granting a waiver from the
25 REST Rules, and that Mohave has not claimed that it cannot comply with the REST Rules absent a
26 waiver.⁹ Sierra Club contends that Staff's belief that benefits of the RPG WTE facility outweigh the

27 ⁷ Staff Initial Post-Rehearing Brief ("Staff Br.") at 2.

⁸ Rehearing ("Rhg.") Exhibit S-2 (May 10, 2011 Utilities Division Memorandum and Recommended Order) at 7-8.

28 ⁹ Sierra Club Initial Post-Rehearing Brief ("Sierra Club Br.") at 18. A.A.C. R14-2-1816 provides as follows:
R14-2-1816. Waiver from the Provisions of this Article

1 potential consequences does not constitute good cause for relief from the requirements of the REST
 2 Rules.¹⁰ Sierra Club argues that notwithstanding Staff's belief that the benefits of the RPG WTE
 3 facility outweigh the detriments, there is a difference between burning biogenic material and
 4 landfilling it, in that the combustion of biogenic material in MSW immediately releases all of its
 5 stored carbon as carbon dioxide, while landfilling it also releases the stored carbon, but over an
 6 extended period as it degrades.¹¹ Sierra Club also argues that granting Mohave a waiver in this case
 7 "is essentially the same as telling Mohave that it need not comply with the REST Rules except for the
 8 distributed generation requirements" because the electricity generated by the RPG WTE facility
 9 would more than satisfy Mohave's REST requirements for years to come.¹²

10 Mohave argues that the REST Rules do not require Mohave to demonstrate an inability to
 11 meet the renewable energy standards through acquiring currently approved Eligible Renewable
 12 Energy Resources in order to obtain a waiver, and that Sierra Club's witness acknowledged this.¹³
 13 Mohave points out that approval of the Application constitutes neither approval of any portion of the
 14 RPG WTE facility's output being included within Mohave's REST portfolio, nor a Commission
 15 determination as to the prudence of any power agreement Mohave might enter into with RPG.¹⁴
 16 Mohave asserts that the experimental nature of this WTE project is consistent with both the REST
 17 Rule waiver provision and pilot program provision.¹⁵ Mohave states that Decision No. 72500
 18 approves a limited experiment, for this particular case and for this particular entity, that affords the
 19 Commission an opportunity to gather data and learn whether WTE should be allowed in the future for
 20 other entities.¹⁶ Mohave argues that the Application, Staff's analysis and Decision No. 72500 all
 21 demonstrate good cause for granting a waiver,¹⁷ and that the Commission's desire to facilitate a
 22

-
- 23 A. The Commission may waive compliance with any provision of this Article for good cause.
 24 B. Any Affected Utility may petition the Commission to waive its compliance with any provision of this
 25 Article for good cause.
 26 C. A petition filed pursuant to these rules shall have priority over other matters filed at the Commission.

27 ¹⁰ Sierra Club Br. at 18.

¹¹ Sierra Club Br. at 19, citing to Rhg. Exhibit SC-9 at 6.

¹² Sierra Club Br. at 19, referring to Rhg. Exhibit Newman-1.

¹³ Mohave Initial Post-Rehearing Brief ("Mohave Br.") at 10, citing to Rhg. Tr. at 136-37.

¹⁴ Mohave Br. at 11.

¹⁵ Mohave Post-Rehearing Reply Brief ("Mohave Reply Br.") at 7.

¹⁶ Mohave Reply Br. at 6-7, citing to Open Meeting Evidentiary Hearing ("OMEH") Tr. at 130-31, 140.

¹⁷ Mohave Br. at 10.

1 limited experiment for a specific technology, such as WTE, is sufficient good cause, in and of itself,
2 to grant a waiver.¹⁸

3 Mohave contends that Staff's analysis has demonstrated the potential benefits associated with
4 approving the Application, especially compared to landfilling the MSW that RPG plans to use as fuel
5 for the WTE facility, and that the various permitting requirements for the WTE facility will protect
6 air quality, regulate emissions, and provide the public with additional opportunities to participate in
7 the approval process.¹⁹ Mohave asserts that despite Sierra Club's contention that some of the
8 potential benefits of the WTE facility are overstated and potential detriments understated, Sierra Club
9 has not demonstrated that Decision No. 72500 is unjust, unwarranted, or should now be changed.²⁰

10 In the course of analyzing the Application, Staff looked at water impacts, emissions, land
11 impacts, and recycling rate impacts of WTE facilities as compared with fossil fuel plants.

12 Staff notes that WTE facilities typically require a similar amount of water per unit of
13 electricity generated as fossil fuel plants.²¹

14 In regard to emissions, Staff notes that sulfur dioxide ("SO₂") emission levels from a WTE
15 facility are generally less than coal-fired facilities, greater than natural gas facilities, and on par with
16 biomass and landfill gas-to-energy facilities.²² Staff states that nitrogen oxides ("NO_x") emission
17 levels from a WTE facility are generally less than coal-fired, landfill gas-to-energy, or biomass
18 facilities but greater than natural gas facilities; particulate matter ("PM-10") emission levels from a
19 WTE facility are generally less than coal-fired and landfill gas-to-energy facilities but greater than
20 natural gas facilities; and carbon dioxide ("CO₂") emissions from a WTE facility tend to be less than
21 coal-fired and landfill gas-to-energy facilities, but greater than natural gas and biomass facilities.²³
22 Staff further notes that CO₂ emissions from biogenic sources are considered "recycled" or carbon-
23 neutral because the sources of the emissions, prior to being used as fuel, were absorbing CO₂ from
24 the atmosphere.²⁴ Staff points out that in biomass facilities, all of the CO₂ emissions are carbon-

25 ¹⁸ Mohave Reply Br. at 5.

26 ¹⁹ Mohave Br. at 13-14.

27 ²⁰ *Id.* at 14.

28 ²¹ Rhg. Exhibit S-2 at 5.

²² *Id.* at 4.

²³ *Id.*

²⁴ Rhg. Exhibit S-2 at 5.

1 neutral because all of the fuel is renewable, and that in a WTE facility, where the fuel is a mixture of
 2 biogenic and non-biogenic sources, there will be carbon-neutral CO₂ emissions from the biogenic
 3 sources and fossil fuel based CO₂ emissions from the non-biogenic sources.²⁵ Staff states that
 4 although the fuel source for landfill gas-to-energy facilities is derived from the breakdown of
 5 biogenic materials in the landfill, the methane leakage from landfills accounts for significant
 6 emissions of CO₂ equivalent, and that current estimates show that one ton of MSW combusted rather
 7 than landfilled reduces greenhouse gas emissions by an average of one ton of CO₂.²⁶

8 In regard to land impacts associated with WTE facilities, Staff states that the non-hazardous
 9 ash residue from the burning of MSW is typically deposited in landfills, with about 10 percent of the
 10 total ash being put to beneficial use such as daily cover in landfills and road construction.²⁷ Staff
 11 states that WTE plants reduce the space required for landfilling by about one square foot per ton of
 12 MSW.²⁸ Staff notes that WTE plants also do not have the aqueous emissions, or leachate, that may
 13 be experienced in landfills, either now or in the distant future, and that burning waste at extremely
 14 high temperatures also destroys chemical compounds and disease-causing bacteria.²⁹

15 In regard to recycling rate impacts, Staff states that MSW combustion processes using refuse-
 16 derived fuel can also be equipped to recover recyclables, thereby increasing recycling rates, before
 17 shredding the combustible fraction to uniform size for incineration, and that WTE plants recover
 18 more than 700,000 tons of ferrous metals for recycling annually.³⁰ Staff notes that recycling metals
 19 saves energy and CO₂ emissions that would have been emitted if the materials were mined and new
 20 metals, such as steel, were manufactured.³¹

21 Staff notes that output from the proposed RPG WTE facility would help diversify Mohave's
 22 energy resource portfolio and reduce reliance on fossil fuel based generation.³² Staff contends that
 23 the grant of a waiver of the REST Rules in this instance is appropriate because the waiver would be
 24

25 ²⁵ *Id.*

26 ²⁶ *Id.*

27 ²⁷ *Id.*

28 ²⁸ *Id.*

29 ²⁹ Rhg. Exhibit S-2 at 5-6.

30 ³⁰ *Id.* at 6.

31 ³¹ *Id.*

32 ³² Staff Br. at 4-5, citing to Rhg. Tr. at 308.

1 addressing a fundamental reason for enacting the REST Rules, namely the diversification of energy
2 resources.³³

3 Even taking into account Sierra Club's argument that landfilling and WTE processes both
4 result in carbon release, we agree with Staff that the many potential benefits of the RPG WTE facility
5 outweigh the potential consequences, when compared with the alternative of landfilling the MSW
6 from which the RPG WTE facility will obtain biogenic material to produce baseload electricity. We
7 agree with Mohave that air quality permitting requirements for the WTE facility will regulate
8 emissions and provide the public with additional opportunities to participate in the approval process
9 for the proposed WTE facility. The evidence in this proceeding supports a waiver of the REST Rules
10 to allow RECs to be associated with the output of the proposed RPG WTE facility.

11 **B. Whether Electricity Produced by the RPG WTE Facility Qualifies as a Pilot**
12 **Program under the REST Rules**

13 Sierra Club proffers several arguments contending that the energy produced by the proposed
14 RPG WTE plant is not eligible for designation as a pilot program under the REST Rules. Sierra Club
15 argues that the proposed RPG WTE plant is precluded from pilot program designation because the
16 Commission "excluded" MSW from the definition of Renewable Energy Resource in the REST
17 Rules. Sierra Club also argues that language appearing in Rule 1802.D operates to preclude the
18 proposed RPG WTE plant from pilot program designation; that the non-renewable components of
19 MSW disqualify MSW from being an Eligible Renewable Resource under Rule 1802.D; and that the
20 emissions produced by combustion of MSW preclude the proposed RPG WTE plant from pilot
21 program designation. Mohave and Staff disagree, and argue that the record supports designation of
22 the proposed RPG WTE facility as a pilot program. We address these issues below.

23 1. Whether MSW was "Excluded" from the Definition of an Eligible Renewable
24 Energy Resource

25 Sierra Club argues that the Commission "specifically excluded" MSW from the definition of
26 an Eligible Renewable Energy Resource in the REST Rules, and that designation of WTE as
27 renewable energy at this time would therefore circumvent the Commission's previous determination

28 ³³ Staff Br. at 5. Staff notes that the Arizona Court of Appeals recently noted that the REST Rules were designed to prevent the future adverse rate effects of failing to diversify electric energy resources now.

1 to exclude it.³⁴

2 Sierra Club cites to the January 21, 2005, Staff Report on Proposed Changes to the
3 Environmental Portfolio Standard Rules, Docket Nos. RE-00000C-00-0377 and RE-00000C-05-
4 0030, wherein Staff included a definition of "Biomass" that included the term "municipal solid
5 wastes." Following that January 21, 2005 Staff Report, on April 22, 2005, Staff docketed a letter to
6 interested stakeholders that included a subsequent draft of proposed changes to the Environmental
7 Portfolio Standard Rules. That April 22, 2005 draft also included a definition of "Biomass" that
8 included "municipal solid wastes." Following that, on February 3, 2006, Staff docketed a Draft Rules
9 Package. The February 3, 2006, Draft Rules Package did not include a definition of "Biomass."
10 Sierra Club states that the Staff Report's inclusion of "municipal solid wastes" in the definition of
11 "Biomass" triggered a vigorous debate, and asserts that "[t]he Commission at that time considered the
12 very same claims that are being advanced for WTE in this case and rejected them."³⁵

13 Staff asserts that Sierra Club's position is without merit because there is no restriction in the
14 REST Rules that would prevent the Commission from reconsidering a certain technology for a pilot
15 program.³⁶ Staff points out that A.A.C. R14-2-1802.D provides that "the Commission may adopt
16 pilot programs in which additional technologies are established as Renewable Energy Resources,"
17 and asserts that the word "additional" does not preclude designation for a pilot program of
18 technologies that the Commission had previously considered.³⁷

19 As Staff states, A.A.C. R14-2-1802.D contains no restriction on Commission consideration of
20 additional technologies for a pilot program under the REST Rules, regardless of whether the
21 technology in question has been the subject of prior consideration.

22 The text of the February 3, 2006, Draft Rules Package, which was published in the Arizona
23 Administrative Register on April 21, 2006, as ordered by Decision No. 68566 (March 14, 2006), did
24 not include a definition of "Biomass." The published Draft Rules Package included a definition of
25 "Biomass Electricity Generator," which did not specifically include MSW as a fuel.³⁸ Any debate on

26 ³⁴ Sierra Club Br. at 9-10.

27 ³⁵ Sierra Club Br. at 9.

28 ³⁶ Staff Reply Br. at 5.

³⁷ Staff Reply Br. at 5.

³⁸ A.A.C. R14-2-1802.A.2 provides:

the issue of MSW took place prior to publication of the Draft Rules in the Arizona Administrative Register on April 21, 2006. Decision No. 69127 does not indicate "rejection" of MSW, because the Commission did not consider the issue of MSW during the formal rulemaking process between the time of publication of the Draft Rules and the issuance of Decision No. 69127 (November 14, 2006), which adopted the REST Rules.³⁹

2. Whether Language in REST Rule 1802.D Operates to Preclude the RPG WTE Facility from Pilot Program Designation

Sierra Club contends that the last sentence of Rule 1802.D operates to preclude the proposed RPG WTE facility from pilot program designation.⁴⁰

The REST Rule governing designation of a pilot program provides as follows:

The Commission may adopt pilot programs in which additional technologies are established as Eligible Renewable Energy Resources. Any such additional technologies shall be Renewable Energy Resources that produce electricity, replace electricity generated by Conventional Energy Resources, or replace the use of fossil fuels with Renewable Energy Resources. Energy conservation products, energy management products, energy efficiency products, or products that use non-renewable fuels shall not be eligible for these pilot programs.
A.A.C. R14-2-1802.D.

Mohave states that the first part of Rule 1802.D deals with the actual production of electricity, and requires the additional technologies to be Renewable Energy Resources that produce electricity, replace electricity generated by Conventional Energy Resources, or replace the use of fossil fuels

"Biomass Electricity Generator" is an electricity generator that uses any raw or processed plant-derived organic matter available on a renewable basis, including: dedicated energy crops and trees; agricultural food and feed crops; agricultural crop wastes and residues; wood wastes and residues, including landscape waste, right-of-way tree trimmings, or small diameter forest thinnings that are 12" in diameter or less; dead and downed forest products; aquatic plants; animal wastes; other vegetative waste materials; non-hazardous plant matter waste material that is segregated from other waste; forest-related resources, such as harvesting and mill residue, pre-commercial thinnings, slash, and brush; miscellaneous waste, such as waste pellets, crates, and dunnage; and recycled paper fibers that are no longer suitable for recycled paper production, but not including painted, treated, or pressurized wood, wood contaminated with plastics or metals, tires, or recyclable post-consumer waste paper.

The above language of A.A.C. R14-2-1802.A.2, as adopted, is the same as the language in the February 3, 2006, Draft Rules Package, with the exception of the term "dead and downed forest products," which was added during the Commission's formal rulemaking process.

The Draft Rules Package also included a definition of "Biogas Electricity Generator" which includes as a fuel "municipal solid waste through a digester process, and oxidation process, or other gasification process." The language of that definition remained unchanged in the adopted REST Rules, at A.A.C. R14-2-1802.A.1.

³⁹ The issue of MSW was not discussed at the August 10 and 11, 2005 Special Open Meeting during which the Commissioners discussed and voted on several issues related to the drafting of proposed changes to the existing Environmental Portfolio Standard Rules prior to the issuance of Decision No. 68566, and subsequently, Decision No. 69127. See Minutes of August 10 and 11, 2005, Arizona Corporation Commission Special Open Meeting.

⁴⁰ Sierra Club Br. at 16-17.

1 with Renewable Energy Resources.⁴¹ Mohave states that the language in question in the last sentence
 2 of Rule 1802.D operates only to exclude specific demand-side products from eligibility for pilot
 3 programs.⁴² Mohave contends that Sierra Club's argument asks the Commission to misapply and
 4 unduly broaden that last sentence.⁴³

5 Rule 1802.D does not operate to exclude WTE technology from designation as a pilot
 6 program. The first two sentences of Rule 1802.D refer to additional technologies that the
 7 Commission may establish as Eligible Renewable Energy Resources. As Mohave points out, the last
 8 sentence of Rule 1802.D excludes certain products from eligibility for pilot programs, and the phrase
 9 "or products that use non-renewable fuels" refers to those products. The proposed RPG WTE
 10 facility, as a baseload generator, is a technology that would replace the use of Conventional Energy
 11 Resources with Renewable Energy Resources in the form of biogenic combustible materials
 12 contained in the MSW wastestream, and meets the requirement for types of additional technologies
 13 referred to in the first and second sentences of Rule 1802.D.

14 While the percentage of Renewable Energy Resources contained in the MSW to be used as
 15 fuel by the RPG WTE facility to produce electricity is a subject of disagreement in this proceeding, it
 16 is undisputed that the MSW contains Renewable Energy Resource components. Decision No. 72500
 17 approves the RPG WTE facility as a pilot program based on those Renewable Energy Resource
 18 components. The Decision appropriately limits the percentage of electricity produced by the RPG
 19 WTE facility eligible for RECs, and establishes a reporting process for Mohave by which Staff can
 20 monitor the electricity output attributable to Renewable Energy Resources.

21 3. Whether the Non-Renewable Components in MSW Disqualify it from Being
 22 an Eligible Renewable Energy Resource under Rule 1802.D

23 Sierra Club asserts that MSW's fossil fuel, non-renewable components disqualify MSW from
 24 being an Eligible Renewable Energy Resource under Rule 1802.D.⁴⁴ Sierra Club also argues that the
 25 Findings of Fact in Decision No. 72500 which states that burning the biogenic material in MSW is
 26 essentially the same as burning biomass is "wrong," because MSW may include materials that a

27 ⁴¹ Mohave Reply Br. at 6.

⁴² *Id.*

⁴³ *Id.*

28 ⁴⁴ Sierra Club Br. at 16.

1 Biomass Electricity Generator may not use as fuel.⁴⁵

2 Mohave takes the position that any portion of MSW that is not composed of nuclear or fossil
3 fuel meets the definition of a Renewable Energy Resource because it is replaced rapidly by a natural
4 and ongoing process,⁴⁶ and further, that MSW is largely composed of biogenic material, which also
5 qualifies it as a Renewable Energy Resource.⁴⁷

6 Staff states that the RPG WTE facility can qualify as a pilot program because the biogenic
7 portion of the MSW that will be used constitutes a Renewable Energy Resource within the meaning
8 of A.A.C. R14-1801.O.⁴⁸

9 The REST Rules define Renewable Energy Resource as follows: “‘Renewable Energy
10 Resource’ means an energy resource that is replaced rapidly by a natural, ongoing process and that is
11 not nuclear or fossil fuel.”⁴⁹ The fact that MSW also may contain some fuels that are disallowed for
12 use by a Biomass Electricity Generator does not render the biogenic portions non-renewable, and
13 does not remove the biogenic portions of MSW from the definition of Renewable Energy Resource.
14 Sierra Club argues that at some unknown, hypothetical ratio of non-biogenic to biogenic components,
15 a fuel source might not be considered a Renewable Energy Resource.⁵⁰ Even assuming, arguendo,
16 the Sierra Club’s position that the biogenic content of the MSW is 60 percent, the ratio in the
17 anticipated fuel supply for the RPG WTE facility does not approach such a limit.

18 As noted above, while the percentage of Renewable Energy Resources contained in the MSW
19 to be used by the RPG WTE facility is an issue in this case, it is undisputed that the MSW contains
20 components that meet the definition. Also, many of the biomass fuel sources listed in the REST
21 Rules’ definition of Biomass Electricity Generator are present in MSW. Hence, the statement in
22 Decision No. 72500 that burning the biogenic material in MSW is essentially the same as burning
23 biomass is not in error. Based on the evidence presented in this case, we find that MSW’s non-
24 biogenic, non-renewable components do not disqualify MSW from being designated an Eligible
25

26 ⁴⁵ Sierra Club Br. at 17, citing to A.A.C. R14-2-1802.A.2.

27 ⁴⁶ Mohave Reply Br. at 5, fn 22.

28 ⁴⁷ Mohave Reply Br. at 6.

⁴⁸ Staff Br. at 6.

⁴⁹ See A.A.C. R14-2-1801.O.

⁵⁰ Sierra Club Br. at 16-17, citing to Rhg. Tr. at 468-69.

1 Renewable Energy Resource pursuant to Rule 1802.D.

2 4. Whether Emissions Produced by Combustion of MSW Preclude Pilot Program
3 Designation

4 Sierra Club argues that MSW is not a “clean” energy resource and therefore should not be
5 considered renewable energy.⁵¹ Sierra Club expresses concern that burning MSW may exacerbate
6 existing air quality problems and adversely affect human health.⁵²

7 Mohave states that the RPG WTE facility will be subject to a permitting process that includes
8 public participation and compliance requirements.⁵³ Mohave states that as a new plant, the RGP
9 WTE facility will be subject to federal regulations, which include subpart Eb of the New Source
10 Performance Standards (“NSPS”), a regulation that establishes enforceable emission limitations and
11 the National Emission Standards for Hazardous Air Pollutants (“NESHAP”).⁵⁴ Mohave states that
12 the facility will also be subject to on-going monitoring, reporting and inspection programs designed
13 to ensure compliance.⁵⁵

14 Staff contends that Sierra Club’s argument that a fuel must be “clean” is misguided, because
15 the definition of Renewable Energy Resource in the REST Rules does not require a resource to be
16 emission-free, as a Sierra Club witness acknowledged.⁵⁶ Staff notes that the REST Rules recognize
17 the use of MSW as an Eligible Renewable Energy Resource in the context of biogas and landfill gas
18 generators, and contends that the fact that the proposed RPG WTE facility will produce emissions
19 does not disqualify its output from recognition as being produced from an Eligible Renewable Energy
20 Resource.⁵⁷ Staff states that any pollution concerns raised by Sierra Club are better addressed by the
21 agencies that specifically regulate pollutants, such as the Maricopa County Air Quality Department,
22 Arizona Department of Environmental Quality, and the U.S. Environmental Protection Agency.⁵⁸

23 The REST Rules’ definition of Renewable Energy Resource does not require a resource to be

24 ⁵¹ Sierra Club Br. at 11.

25 ⁵² *Id.* at 14.

26 ⁵³ Mohave Br. at 11, citing to Rehearing Exhibit A-1 (Rebuttal Testimony of Mohave witness Robert T. Estes).

27 ⁵⁴ Mohave Br. at 11-13.

28 ⁵⁵ *Id.* at 13.

⁵⁶ Staff Reply Br. at 6, citing to Rhg. Tr. at 141-142. The witness acknowledged that biomass generation facilities, which are Eligible Renewable Energy Resources under the REST Rules, emit SO₂, NO_x, CO₂, and particulate matter. Rhg. Tr. at 141.

⁵⁷ Staff Reply Br. at 5, 6, citing to A.A.C. R14-2-1802.A.1 and 8.

⁵⁸ Staff Reply Br. at 6.

1 emission-free. We agree with Staff that REC recognition of the RPG WTE output is not precluded
 2 by the fact that the proposed facility will produce emissions during operation. As Sierra Club
 3 acknowledges, enforcement of air quality regulations is not within the purview of this Commission.⁵⁹
 4 Moreover, as also acknowledged by Sierra Club, because RPG has not yet applied for an air quality
 5 permit, the extent to which operation of the RPG WTE facility will affect air quality is not clearly
 6 known.⁶⁰ The appropriate County, State, and Federal regulating authorities have expertise in air
 7 quality analysis and regulation, and have authority to require RPG to take mitigation measures to
 8 prevent exacerbation of existing air quality problems.⁶¹ We must defer to the expertise and
 9 regulatory authority of the appropriate jurisdictional agencies to ensure that the RPG WTE facility
 10 will operate in compliance with applicable laws governing air emissions.

11 **C. The Appropriate Percentage of Electricity Production Eligible for RECs**

12 Decision No. 72500 orders that for purposes of determining the RECs for energy produced by
 13 the RPG WTE facility, until further order of the Commission, 90 percent of the total kWhs of energy
 14 produced shall be considered as being produced by an Eligible Renewable Energy Resource.

15 Sierra Club contends that if the RPG WTE facility is approved as a pilot program or if a
 16 waiver is granted, the RECs should be adjusted downward from the 90 percent of kWh production
 17 output allowed by Decision No. 72500, and should not exceed the 75 percent amount recommended
 18 by Staff.⁶² Sierra Club alleges that the 90 percent determination in Decision No. 72500 is not
 19 supported by substantial or credible evidence; that the 90 percent determination is arbitrary because it
 20 is based on a single sample provided by RPG, and not on actual operating data for WTE facilities
 21 from across the country; and that a failure to adjust the RECs downward from 90 percent would harm
 22 ratepayers irreparably.

23 Mohave asserts that setting the level of RECs at 90 percent of the total kWhs produced by the
 24 RPG WTE facility best reflects the MSW composition that RPG expects to receive at the WTE
 25 facility, and that this level benefits ratepayers by allowing energy and RECs to be provided at a lower

26 ⁵⁹ See Sierra Club Br. at 14.

27 ⁶⁰ See *id.*

28 ⁶¹ See OMEH Tr. at 172-174 (Presentation of Jo Crumbaker, Manager of the Air Quality and Analysis Department, Maricopa County Air Quality Control Department); Rehearing Exhibit A-1 at 4-9.

⁶² Sierra Club Br. at 20; Sierra Club Reply Br. at 7.

1 unit cost.⁶³

2 Staff recommends that 75 percent of the energy produced at the RPG WTE facility be deemed
3 eligible for RECs. Staff states that the evidence also supports the Commission's determination in
4 Decision No. 72500 to set the REC percentage at 90 percent of the energy produced at the RPG WTE
5 facility.

6 1. Whether Reliance on the RPG Sample was Arbitrary

7 Prior to preparing its Staff Memorandum and Recommended Order that was filed in this
8 docket on May 10, 2011, Staff examined the composition of the local MSW sample provided by
9 Mohave and RPG through a Staff data request.⁶⁴ Mohave provided Staff with a breakdown, by
10 category, of a MSW sample as an example of the MSW that could be used as fuel for the proposed
11 RPG facility ("RPG Sample").⁶⁵ Staff stated in the Staff Memorandum that the MSW sample came
12 from the City of Glendale Materials Recovery Facility ("MRF").⁶⁶ At the rehearing, Mohave's
13 witness Mr. Blendu clarified that the RPG Sample was obtained from one truckload of MSW
14 obtained in August 2010 from a private hauler that picked up residential and commercial MSW from
15 an area in the City of Avondale that has curbside recycling, and would normally deposit the MSW in
16 the City of Glendale's MRF.⁶⁷ Staff determined that prior to the recycling at the RPG WTE facility,
17 the MSW in the RPG Sample, which Staff assumed to be typical of that in the Phoenix Metropolitan
18 area, is composed of about 82 percent biogenic material, 12 percent non-biogenic material, and 6
19 percent non-combustible material, such as glass and metal.⁶⁸ Staff determined that after taking
20 recycling rates provided by RPG into account, the biogenic material accounts for about 95 percent of
21 the waste stream, with non-biogenic and non-combustible materials accounting for only
22 approximately 2 percent and 3 percent of the waste stream, respectively.⁶⁹ Using the RPG sample
23 data and heat rate factors from the U.S. Energy Information Administration ("EIA"), Staff
24 determined that the biogenic material contributes about 91 percent of the energy to the process while

25 ⁶³ Mohave Reply Br. at 8.

26 ⁶⁴ Rhg. Tr. at 433, OMEH Tr. at 168.

27 ⁶⁵ Rhg. Exhibit S-2 at 3.

28 ⁶⁶ *Id.*

⁶⁷ Rhg. Tr. at 350-55.

⁶⁸ Rhg. Exhibit S-2 at 3.

⁶⁹ *Id.*

1 non-biogenic materials contribute about 9 percent of the energy to the process, with the non-
 2 combustibles contributing nothing, because glass and metal do not burn to produce energy.⁷⁰ Staff
 3 noted that the 91 percent heat output from biogenic materials by the RPG WTE facility was higher
 4 than the national average of 60 to 75 percent estimate that Staff received from Beta Labs, which is a
 5 lab that does analysis of ASTM-D6866 samples from WTE facilities across the U.S.⁷¹ Staff stated its
 6 resulting recommendation as follows:

7 Based on local data representing that 91 percent of the energy would come from
 8 biogenic sources, after recycling, and general national information indicating that 60-
 9 75 percent of WTE facility energy is generated from biogenic sources, Staff
 10 recommends that, at this time, 75 percent of the kWhs generated by the proposed RPG
 WTE facility be deemed biogenic and produced by an Eligible Renewable Energy
 Resource.

11 Rhg. Exhibit S-2 at 8.

12 Sierra Club contends that the 90 percent determination is arbitrary because it is based on a
 13 single sample provided by RPG, and not on actual operating data for WTE facilities from across the
 14 country.⁷² Sierra Club asserts that the RPG sample should be disregarded because it is not
 15 representative or typical of MSW in the Phoenix metropolitan area.⁷³ At the rehearing, Sierra Club
 16 produced a study conducted by the City of Phoenix in 2003, performed by the Cascadia Consulting
 17 Group ("Cascadia study").⁷⁴ Sierra Club states that though Staff did not use the results from the
 18 Cascadia study in its analysis, the percentages of biogenic material in MSW found in the Cascadia
 19 study fall within the same range as the national data Staff obtained and used to support its 75 percent
 20 recommendation.⁷⁵ Sierra Club states that the biogenic content of the MSW analyzed in the Cascadia
 21 study was approximately 60 percent,⁷⁶ which is consistent with the biogenic content of MSW
 22 referenced by Mohave's witness Professor Marco Castaldi, who testified that an analysis of three
 23 WTE facilities from around the country showed the biogenic content of MSW to be 64 to 66

24 ⁷⁰ *Id.*

25 ⁷¹ Rhg. Tr. at 433. ASTM-D6866 is a standardized method of identifying the carbon-14 isotope ("C14") and providing a
 value of renewable carbon content within any solid, liquid or gas. See Rhg. Exhibit S-2 at 3.

26 ⁷² Sierra Club Reply Br. at 6-7.

27 ⁷³ Sierra Club Br. at 3; Sierra Club Reply Br. at 4-7.

28 ⁷⁴ Rhg. Exhibit SC-9.

⁷⁵ Sierra Club Reply Br. at 6.

⁷⁶ Sierra Club Br. at 5, citing to Tr. at 477. Sierra Club's witness Dr. Jeffrey Morris testified that based on the Cascadia
 study, approximately 55 percent of the electricity would come from biogenic sources. Rhg. Exhibit SC-1 (Direct
 Testimony of Sierra Club witness Dr. Jeffrey Morris) at 4.

1 percent.⁷⁷ The Cascadia Study involved analysis of 283 truckloads of MSW in from January 27
2 through February 7, 2003, and from August 1 through August 15, 2003, from six different areas of
3 the City of Phoenix.⁷⁸ Sierra Club contends that the Cascadia study is more reliable than the RPG
4 sample, and notes that it is used by the City of Glendale to characterize its waste.⁷⁹ Sierra Club
5 argues that the garbage sampled in the Cascadia study was a statistically valid scientific sample, so
6 that the anomalies presented by a single truckload, such as the one from which the RPG sample was
7 taken, would be averaged, and that the results would be generally representative of the composition
8 of Phoenix MSW.⁸⁰

9 Sierra Club argues that the RPG sample was an arbitrary selection of a single truckload of
10 garbage without specific knowledge of where it came from, whether it was residential or commercial
11 or both, or whether it represented the MSW that would actually be delivered to the RPG facility.⁸¹
12 Sierra Club also takes issue with the recycling rates determined by RPG, because there was no effort
13 to determine the recycling rates achieved by other material recycling facilities at other WTE facilities
14 in the United States.⁸²

15 Mohave asserts that the Cascadia study demonstrates that MSW composition can vary by
16 area,⁸³ and that it does not reflect the impact of a recycling facility located at the RPG WTE facility.⁸⁴
17 Mohave argues that it was reasonable for Staff to perform its analysis based on the RPG sample
18 rather than relying on the Cascadia study, because the RPG sample came from the area most likely to
19 supply the RPG WTE facility.⁸⁵ Mohave states that its witness Mr. Blendu described the process for
20 developing the sample in detail, both in prefiled rebuttal testimony and on the stand at the
21

22 ⁷⁷ Sierra Club Br. at 5, citing to Tr. at 223.

23 ⁷⁸ Rhg. Exhibit SC-9 at 3.

24 ⁷⁹ Sierra Club Br. at 4 and Sierra Club Reply Br. at 5, citing to Rhg. Exhibit SC-8 (Direct Testimony of Sierra Club witness Sandy Bahr) at 9.

25 ⁸⁰ Sierra Club Reply Br. at 5, citing to Tr. at 475.

26 ⁸¹ Sierra Club Reply Br. at 5, citing to Tr. at 354-55 (Mohave's witness did not know the proportions of the garbage sampled that came from residential and commercial sources) and Tr. at 472 (Staff's witness acknowledged that she had no way of knowing whether the single truckload of garbage will be representative of the trash that will be burned at the WTE facility).

27 ⁸² Sierra Club Br. at 6, citing to Rhg. Tr. at 364-65.

28 ⁸³ Mohave Reply Br. at 2, citing to Sierra Club's Exceptions to the Staff Recommended Order at 5.

⁸⁴ Mohave Br. at 9.

⁸⁵ Mohave Br. at 9, citing to Rhg. Tr. at 352.

1 rehearing.⁸⁶ Mohave argues that because the RPG sample was secured for the purpose of preparing
 2 an air quality permit application and for the purpose of obtaining supplier performance commitments,
 3 RPG was incited to secure a representative sample,⁸⁷ and that as Mr. Blendu, the developer of the
 4 project, explained, it was important to evaluate the MSW that RPG can expect to receive at the
 5 proposed WTE facility, because the purpose of the sample is to secure emission estimates and
 6 guarantees based on the chemical analysis of the trash.⁸⁸ Mohave states that Mr. Blendu is confident
 7 that the RPG sample is more representative of the MSW the RPG WTE facility will receive than is
 8 the Cascadia study,⁸⁹ and argues that Sierra Club presented no evidence that invalidated the local
 9 sample or demonstrated a different composition of the MSW in the Avondale area from which the
 10 RPG sample was delivered.⁹⁰

11 In regard to Sierra Club's implication that the recycling rates RPG expects to accomplish
 12 prior to incinerating the MSW were formulated in order to "boost the biogenic content of the
 13 'sample' from 82% to 95%,"⁹¹ Mohave responds that the RPG sample was taken and the recycling
 14 rates were established for purposes unrelated to the amount of the biogenic composition of the MSW,
 15 in consultation with RPG's consultant URS and Mr. Gomez, who managed the Glendale MRF.⁹²
 16 Mohave points out that the RPG sample and recycling statistics were provided to Staff before
 17 Mohave or RPG knew how they would be utilized by Staff or the Commission.⁹³ Mohave states that
 18 Sierra Club presented no evidence that the recycling rates provided by RPG and used by Staff in its
 19 analysis are unreasonable.⁹⁴

20 Staff notes that Mr. Blendu testified that RPG is comfortable that the proposed WTE facility
 21 will be able to achieve the same biogenic content as the RPG sample,⁹⁵ and that Mr. Blendu
 22 acknowledged that there is a high incentive for RPG to achieve the same biogenic content as the RPG

23 ⁸⁶ Mohave Reply Br. at 2, citing to Rhg. Exhibit A-4 (Rebuttal Testimony of Mohave witness Ronald D. Blendu) and
 24 Rhg. Tr. at 34-44, 352-66.

⁸⁷ Mohave Br. at 9-10, citing to Rhg. Tr. at 341.

⁸⁸ Mohave Br. at 9-10 and Mohave Reply Br. at 2, citing to Rhg. Tr. at 341.

⁸⁹ Mohave Reply Br. at 2, citing to Rhg. Tr. at 345, 353, 355.

⁹⁰ Mohave Reply Br. at 2.

⁹¹ See Sierra Club Br. at 6.

⁹² Mohave Reply Br. at 2-3, citing to Rhg. Tr. at 360-61.

⁹³ Mohave Reply Br. at 3.

⁹⁴ Sierra Club Reply Br. at 3.

⁹⁵ Staff Reply Br. at 2, citing to Rhg. Tr. at 405.

sample, because the Commission may reduce the level of qualifying RECs commensurate with the actual renewable, or biogenic, content of the energy produced at the WTE facility.⁹⁶

2. Whether the 90 Percent REC Determination was Supported by Credible and Substantial Evidence

Sierra Club argues that the determination in Decision No. 72500 that 90 percent of the electricity produced by the RPG WTE facility will come from biogenic sources is not supported by credible or substantial evidence.⁹⁷ Sierra Club opines that Staff is being “generous” in acknowledging the RPG sample by using the high end of its 60-75 percent range when it recommends that the Commission recognize 75 percent of the electricity produced by the RPG WTE facility as being produced by biogenic sources.⁹⁸ Sierra Club argues that the percentage of biogenic material in MSW is closer to 60 or 65 percent than 90 percent;⁹⁹ that it is “pretty much impossible” to achieve 91 percent of the energy produced by a WTE facility from biogenic sources; that 91 percent has never been achieved; and that if MSW was 91 percent biogenic, it would almost be biomass, and not garbage.¹⁰⁰ Sierra Club states that the three sources of information cited by Staff in its Staff Memorandum indicated a range of 40 percent to 75 percent biogenic fractions in MSW;¹⁰¹ that Mohave’s witness Professor Marco Castaldi testified that typical WTE stack emissions contain about 65 percent of biogenic CO₂;¹⁰² and that information from the Energy Recovery Council, which was attached to the testimony of Mohave witness Ronald Blendu, indicates that the biogenic emissions from WTE facilities are 67 percent.¹⁰³ Sierra Club contends that the percentage of electricity produced by biogenic sources cannot be higher than 67 percent, the figure cited by the Energy Recovery Council, because the Energy Recovery Council is an industry organization supporting WTE as a renewable resource.¹⁰⁴

Staff states that while it recommends that 75 percent of the energy produced at the proposed

⁹⁶ Staff Reply Br. at 2, citing to Rhg. Tr. at 411.

⁹⁷ Sierra Club Br. at 7; Sierra Club Reply Br. at 4.

⁹⁸ Sierra Club Br. at 7; Sierra Club Reply Br. at 3.

⁹⁹ Sierra Club Br. at 15.

¹⁰⁰ *Id.* at 7.

¹⁰¹ Sierra Club Reply Br., citing to Rhg. Exhibit S-2 at 8, fn 29.

¹⁰² Sierra Club Reply Br. at 3-4, citing to Rhg. Tr. at 223.

¹⁰³ Sierra Club Reply Br. at 3, citing to Exh. RB-2 attached to Rehearing Exhibit A-4.

¹⁰⁴ Sierra Club Reply Br. at 3.

1 WTE facility should qualify for RECs, the Commission's 90 percent determination is supported by
2 the RPG sample, which reveals that the biogenic portion of that sample contributed approximately 91
3 percent of the total energy output.¹⁰⁵

4 Mohave asserts that the evidence demonstrates that the local MSW available for use at RPG's
5 proposed WTE facility, which includes additional removal of recyclable material prior to
6 incineration, is likely to produce a higher percentage of energy from biogenic material than is
7 customarily experienced with a mass burn facility, and that the evidence supports keeping the
8 percentage at 90 percent, not lowering it.¹⁰⁶

9 3. Whether Failure to Reduce the 90 Percent Determination Would Cause
10 Irreparable Harm to Ratepayers

11 Sierra Club contends that a failure to adjust the RECs downward from 90 percent at this time
12 would harm ratepayers irreparably.¹⁰⁷ Sierra Club argues that setting the REC level at 90 percent will
13 result in Mohave ratepayers paying too much for energy, and that once the RPG WTE facility is built,
14 the customers cannot be made whole because it will be too late to make the necessary adjustments to
15 conform to actual operating data, which Sierra Club believes will show the kWhs generated to come
16 from a less than 90 percent biogenic source.¹⁰⁸ Sierra Club asserts that if, after two years of operating
17 experience, it is determined that the percentage should have been set at a lower level consistent with
18 Staff's recommendation, it will be "virtually impossible" to reset the level without shutting down the
19 facility, because financing will be based on RECs at a 90 percent level.¹⁰⁹

20 Staff contends that Sierra Club's irreparable harm argument should be disregarded because it
21 is premature, in that there is no evidence in the record to establish what a REC produced by the
22 proposed WTE facility will cost; because it is speculative to suggest that the level of RECs will be
23 reduced after the facility is operational; and because it is erroneous, in that the Commission will
24 ultimately determine how much of the cost of the WTE facility can be recovered through Mohave's
25 REST surcharge. Staff states that the economic costs associated with the WTE project are still

26 ¹⁰⁵ Staff Br. at 7, citing to Rhg. Exhibit S-2 at 3.

27 ¹⁰⁶ Mohave Reply Br. at 3.

28 ¹⁰⁷ Sierra Club Br. at 8, 20.

¹⁰⁸ *Id.*

¹⁰⁹ Sierra Club Br. at 8-9.

1 unknown, because Mohave does not know whether and to what extent the output from the proposed
 2 WTE facility will qualify for RECs, or whether Mohave will even purchase any power from the
 3 facility.¹¹⁰ Staff contends that Sierra Club's suggestion that the Commission would reset the level of
 4 RECs is also speculative, because the actual biogenic content that will be utilized by the WTE facility
 5 cannot be known until the facility is operational.¹¹¹ Finally, Staff states that Sierra Club's assertion
 6 that Mohave's ratepayers would have no recourse in the event the percentage is ultimately lowered is
 7 patently false. Staff explains that when the Commission considers and approves Mohave's annual
 8 REST Plan, the Commission could allow only a portion of the costs to be recovered through the
 9 surcharge, and disallow recovery of a portion of the total cost of the power.¹¹²

10 Staff also addresses Sierra Club's assertion that it would be "virtually impossible" for the
 11 Commission to lower the percentage in the future because financing will be based on Mohave
 12 receiving RECs at the Commission-approved percentage.¹¹³ Staff states that this assertion assumes
 13 that the Commission would not lower the percentage level if doing so would cause the plant to shut
 14 down, and Staff contends that there is no evidence to support such an assumption.¹¹⁴ Staff notes that
 15 it is RPG, and not Mohave or its ratepayers, that bears the financial risk associated with the proposed
 16 WTE facility.¹¹⁵ Staff notes that Mr. Blendu testified that he is aware of the risk that the Commission
 17 may lower the renewable percentage in the future.¹¹⁶ Staff states that there is no reason to believe
 18 that the Commission would not lower the renewable percentage should the circumstances merit it.¹¹⁷

19 4. Conclusion on Appropriate Percentage of Electricity Production Eligible for 20 RECS

21 Based on our evaluation of all the testimony and exhibits presented by the parties to this
 22 proceeding, we find that the evidence clearly supports an affirmation of our determination in
 23 Decision No. 72500 that it is appropriate to consider 90 percent of the total kWhs of energy from the
 24 RPG WTE facility as being produced by an Eligible Renewable Energy Resource at this time.

25 ¹¹⁰ Staff Reply Br. at 3, citing to Rhg. Exhibit A-3 at 3-4 and Tr. at 255.

26 ¹¹¹ Staff Reply Br. at 3-4.

27 ¹¹² Staff Reply Br. at 4.

28 ¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ Staff Reply Br. at 4, citing to Rhg. Tr. at 407-08.

¹¹⁷ Staff Reply Br. at 4.

1 We find that Decision No. 72500 reasonably and appropriately recognized Staff's analysis of
2 the RPG sample, including the expected recycling rates at the facility, as reliable evidence of the
3 amount of energy that will be produced at the RPG WTE facility from an Eligible Renewable Energy
4 Resource. The biogenic content of MSW reflected in the 2003 Cascadia study presented at the
5 rehearing by Sierra Club does not reflect the impact of the additional recycling process that will occur
6 prior to incineration of MSW at the RPG WTE facility. Sales of recyclable materials are a key
7 component of the RPG project's economics, and provide additional incentive to RPG to remove
8 additional recyclable materials from the MSW prior to incineration.¹¹⁸ This additional recycling
9 process will increase the biogenic content of the MSW entering the incinerator. We agree with Staff
10 that RPG has a high incentive to achieve the same biogenic content as the RPG sample, because
11 Decision No. 72500 includes a mechanism by which the Commission may reduce the level of
12 qualifying RECs commensurate with the actual renewable, or biogenic, content of the energy
13 produced at the WTE facility, as demonstrated by reports on actual operating data.

14 For the reasons articulated by Staff, we find that Sierra Club's claims of irreparable harm to
15 Mohave's ratepayers are without foundation. Decision No. 72500 orders Mohave to file reports on a
16 semi-annual basis with accurate and timely information relating to the percent of energy generated by
17 the RPG WTE facility from biogenic material, and the MSW categorical composition breakdowns.
18 Decision No. 72500 directs Staff to review the information provided in the reports relating to the
19 percent of energy generated by the RPG WTE facility from biogenic material and, in the event Staff
20 believes that less than 85 percent of the energy produced at the RPG WTE facility is from biogenic
21 sources, to file a recommendation with the Commission to reduce the allowable percentage of RECs
22 from the RPG WTE facility. Decision No. 72500 also provides that Mohave may apply to the
23 Commission to increase the allowable percentage of RECs from the RPG WTE facility, if Mohave
24 believes the amount of energy produced by biogenic sources at the RPG WTE facility exceeds 95
25 percent. We find that the mechanisms put in place by Decision No. 72500, for evaluation of the
26 information to be furnished by Mohave when the facility becomes operational, provide a reasonable
27

28 ¹¹⁸ Rhg. Tr. at 411.

1 and appropriate means for adjusting the level of RECs either upward or downward if operational
 2 evidence in regard to the biogenic portion of the actual MSW used by the proposed RPG WTE
 3 facility demonstrates that an adjustment is appropriate.

4 **III. CONCLUSION**

5 Having reviewed the Application, the entirety of the testimony and evidence presented in the
 6 course of the Open Meeting and Evidentiary Hearing on the Application, and the entirety of the
 7 testimony and evidence presented in the course of the Rehearing, we do not find that the evidence
 8 presented requires any change to the Findings of Fact, Conclusions of Law, or Orders set forth in
 9 Decision No. 72500. We therefore find that Decision No. 72500 should be affirmed in its entirety.

10 * * * * *

11 Having considered the entire record herein and being fully advised in the premises, the
 12 Commission finds, concludes, and orders that:

13 **FINDINGS OF FACT**

- 14 1. On November 5, 2011, Mohave filed the Application with the Commission.
- 15 2. On January 13, 2011, Sierra Club filed a Petition for Leave to Intervene.
- 16 3. On January 25, 2011, by Procedural Order, Sierra Club was granted intervention.
- 17 4. On May 10, 2011, Staff filed a Memorandum and Recommended Order
 18 recommending that the Commission grant a waiver of A.A.C. R14-2-1802.A to the limited extent
 19 necessary to recognize the RPG WTE facility as an Eligible Renewable Energy Resource on an
 20 experimental basis such that energy produced at the facility may count for RECs under A.A.C. R14-
 21 2-1803 and be eligible to satisfy the annual renewable energy requirements established by A.A.C.
 22 R14-2-1804.
- 23 5. On May 20, 2011, Mohave filed a letter with consent of all the parties to inform the
 24 Commission of the parties' agreement to extend the time for filing exceptions to the Staff
 25 Recommended Order.
- 26 6. On May 27, 2011, Mohave and the Sierra Club both filed exceptions to Staff's
 27 Recommended Order.
- 28 7. On June 3, 2011, Ormond Group LLC filed public comment opposing the Application.

1 8. On June 10 and 13, 2011, The Vote Solar Initiative filed public comment opposing the
2 Application.

3 9. On June 13, 2011, the Solar Alliance filed public comment opposing the Application.

4 10. On June 15, 2011, public comment in opposition to the Application by Ivy Schwartz,
5 MD was docketed.

6 11. On June 17, 2011, Commissioner Newman docketed a request to pull the
7 Recommended Order from the Agenda for the Commission's scheduled June 21 and 22, 2011 Open
8 Meeting.

9 12. On June 20, 2011, the Arizona Solar Energy Industries Association filed public
10 comment opposing the Application.

11 13. On June 20, 2011 and July 12, 2011, public comment was filed on behalf of Allied
12 Waste Transportation, Inc. dba Allied Waste Services of Phoenix, opposing the Application.

13 14. On June 20, 2011, Commission Chairman Pierce docketed a memo indicating that his
14 office received 102 substantially similar email communications opposing the Application.

15 15. On June 20 and 21, 2011, public comment opposing the Application from Greenaction
16 for Health and Environmental Justice and Children for a Safe Environment was docketed.

17 16. On June 27, 2011, Solomon filed a Petition for Leave to Intervene.

18 17. On June 30, 2011, Commissioner Newman docketed a copy of a letter to Mohave
19 requesting the presence of representatives from Mohave's and RPG's management at the
20 Commission's July 12 and 13, 2011 Open Meeting.

21 18. On July 1, 2011, seventy-five substantially identical public comment email letters
22 opposing the Application were docketed.

23 19. On July 5, 2011, Commissioner Newman docketed a copy of a letter to Mr. Bradley
24 Angel, Executive Director, Greenaction for Health and Environmental Justice, inviting Mr. Angel to
25 attend the Commission's July 12 and 13, 2011 Open Meeting.

26 20. On July 5, 2011, Commission Chairman Pierce docketed a memo indicating that his
27 office received 176 computer generated email communications from Sierra Club advocating against
28 the Application.

1 21. On July 7, 2011, Commissioner Newman docketed a copy of a letter to Mr. Frank
2 Schinzel and Ms. Lucinda Swann of the Maricopa County Air Quality Department requesting that a
3 representative from the Maricopa County Air Quality Department be available at the Commission's
4 July 12 and 13, 2011 Open Meeting to answer questions in regard to Maricopa County's air quality
5 permitting process and other air quality issues relating to the RPG WTE project.

6 22. On July 7, 2011, Commissioner Newman docketed a letter requesting information
7 about the history of the REST rules.

8 23. On July 8, 2011, public comment was filed by Physicians for Social Responsibility in
9 opposition to the Application.

10 24. On July 8, 2011, a Procedural Order was issued granting Solomon intervention.

11 25. On July 8, 2011, Mohave filed its Opposition to Solomon Industries' Petition for
12 Leave to Intervene.

13 26. On July 8, 2011, Mohave filed a copy of a letter to Commissioner Newman in
14 response to Commissioner Newman's request dated June 30, 2011. Attached to the July 8, 2011
15 letter was a four-page document titled "America's Need for Clean Renewable Energy: The Case for
16 Waste to Energy," which the letter states was prepared by the Local Government Coalition for
17 Renewable Energy.

18 27. On July 8, 2011, a copy of a letter from RPG to Chairman Pierce was docketed.
19 Attached to the letter was a seven-page document titled "Waste-to-Energy: A Renewable Energy
20 Source from Municipal Solid Waste," which the letter states is a position paper from the Solid Waste
21 Processing Division of the American Society of Mechanical Engineers.

22 28. On July 12, 2011, a copy of an email from Mr. Bradley Angel to Commissioner
23 Newman's office was docketed.

24 29. On July 12, 2011, public comment was filed by Arizona PIRG Education Fund in
25 opposition to the Application.

26 30. On July 12, 2011, the May 10, 2011 Staff Recommended Order came on to be heard
27 as Agenda Item No. 20 at an Open Meeting of the Commission. Public comment was taken.

28 31. During the July 12, 2011 Open Meeting, Sierra Club requested an evidentiary hearing.

1 32. On July 13 and 14, 2011, the Commission held an Open Meeting and Evidentiary
2 Hearing on the Application.

3 33. On July 19, 2011, Staff filed e-mail correspondence as directed at the Open Meeting
4 and Evidentiary Hearing held on July 13 and 14, 2011.

5 34. On July 19, 2012, public comment by Joni Bosh was filed in opposition to the
6 Application.

7 35. On July 25, 2011, the Commission issued Decision No. 72500 approving Mohave's
8 request that energy produced at the RPG WTE facility by combustion of MSW be recognized as a
9 pilot program pursuant to A.A.C. R14-2-1802.D.

10 36. On August 12, 2011, Sierra Club filed an Application for Rehearing.

11 37. On August 12, 2011, the Company filed a Statement of Intent Regarding Compliance
12 Filings per Decision No. 72500.

13 38. On August 15, 2011, Senator Robert Blendu filed a copy of a public records request
14 letter to the Commission's Executive Director.

15 39. On August 23, 2011, Mohave file its Response to Application for Rehearing and
16 Alternative Request for A.R.S. § 40-252 Proceeding.

17 40. On August 24, 2011, at an Open Meeting of the Commission, the Commission
18 granted Sierra Club's Application for Rehearing.

19 41. On August 25, 2011, Senator Robert Blendu docketed the response he received to his
20 August 15, 2011, public records request letter.

21 42. On August 26, 2011, a Procedural Order was issued scheduling a procedural
22 conference for August 31, 2011.

23 43. On August 31, 2011, the procedural conference convened as scheduled. Sierra Club,
24 Mohave and Staff appeared through counsel. Solomon did not appear. Counsel for Mohave stated
25 that it had received communication from Solomon that it did not intend to participate in the rehearing.

26 44. On September 13, 2011, a Procedural Order was issued setting a rehearing to
27 commence on November 28, 2011, requiring publication of notice of the rehearing, and setting
28 associated procedural deadlines.

1 45. On October 7, 2011, Sierra Club filed the direct testimony of Sandy Bahr, Doris
2 Cellarius and Dr. Jeffrey Morris.

3 46. On October 11, 2011, Sierra Club filed the list of references that had been
4 inadvertently omitted from Doris Cellarius' October 7, 2011, direct testimony.

5 47. On October 24, 2011, Mohave filed a Notice of Filing Affidavit of Publication and
6 Motion to Require the Sierra Club to Pay Publication Costs.

7 48. On October 25, 2011, Sierra Club filed a Motion for a One Day Postponement in the
8 Hearing. The Motion stated that counsel for Sierra Club had a scheduling conflict on November 28,
9 2011.

10 49. On October 28, 2011, Commissioner Newman docketed a letter to Mohave requesting
11 the docketing of certain documents.

12 50. On October 28, 2011, a Procedural Order was issued rescheduling the evidentiary
13 portion of the hearing to commence November 29, 2011, and scheduling the publicly-noticed
14 November 28, 2011 commencement date solely for the purpose of taking public comments.

15 51. On October 31, 2011, Sierra Club filed its Response to Mohave's Motion to Require
16 Sierra Club to Pay Publication Costs.

17 52. On November 3, 2011, Mohave filed a copy of a letter from Mohave to Commissioner
18 Newman.

19 53. On November 7, 2011, Mohave filed a copy of a letter with attachments in response to
20 Commissioner Newman's October 28, 2011 letter.

21 54. On November 7, 2011, Mohave filed the rebuttal testimony of Michael A. Curtis,
22 Ronald D. Blendu, and Robert T. Estes, and the joint rebuttal testimony of Prof. Nickolas Themelis
23 and Prof. Marco Castaldi.

24 55. On November 18, 2011, Commissioner Newman filed a copy of a letter to Mohave
25 requesting that Mohave's CEO appear at the rehearing to provide testimony on behalf of Mohave.

26 56. On November 21, 2011, Mohave filed a copy of a letter to Commissioner Newman
27 indicating that Tyler Carlson, Mohave's CEO, would appear at the rehearing and would sponsor the
28 prefiled testimony of Michael A. Curtis.

1 57. On November 21, 2011, Staff filed the updated testimony of Laura A. Furrey.

2 58. On November 22, 2011, Commission Chairman Pierce's Office docketed a
3 memorandum indicating that it received 114 substantially identical email public comment letters
4 opposing the Application, emailed by Sierra Club. The filing included a reproduction of one of the
5 letters and listed the names of each commenter.

6 59. On November 23, 2011, Mohave, Sierra Club, and Staff filed summaries of their
7 witnesses' testimonies.

8 60. On November 28, 2011, the rehearing convened for the purpose of taking public
9 comment. Members of the public appeared and provided public comment for the record. Public
10 comment was also taken on December 1, 2011, prior to the close of the rehearing.

11 61. On November 29, 2011, the rehearing convened. Sierra Club, Mohave and Staff
12 appeared through counsel and presented evidence.

13 62. On November 29, 2011, substantially identical public comments from 126 consumers
14 opposing the Application were docketed.

15 63. On November 29, 2011, a petition titled Arizona Student Environmental Coalition
16 requesting rejection of the Application was docketed.

17 64. On December 1, 2011, the evidentiary portion of the rehearing concluded and a post-
18 rehearing briefing schedule was set.

19 65. On December 5, 2011, Commission Chairman Pierce's Office docketed a
20 memorandum indicating that it received 109 substantially identical email public comment letters
21 opposing the Application, emailed by Sierra Club. The filing included a reproduction of one of the
22 letters and listed the names of each commenter.

23 66. On January 10, 2012, Sierra Club, Mohave and Staff filed their Initial Post-Rehearing
24 Briefs.

25 67. On January 18, 2012, Mohave filed a copy of its Initial Post-Rehearing Brief that
26 includes corrected transcript citations.

27 68. On January 19, 2012, Sierra Club, Mohave and Staff filed a Stipulation to Extend
28 Time for Filing Rebuttal Briefs.

69. On January 24, 2012, Sierra Club, Mohave and Staff filed their Post-Rehearing Reply Briefs.

70. On February 14, 2012, substantially identical public comments from 101 consumers opposing the Application were docketed.

71. Having reviewed the Application, the entirety of the testimony and evidence presented in the course of the Open Meeting and Evidentiary Hearing on the Application, and the entirety of the testimony and evidence presented in the course of the Rehearing, we do not find that the evidence presented requires any change to the Findings of Fact, Conclusions of Law, or Orders set forth in Decision No. 72500. We therefore find that Decision No. 72500 should be affirmed in its entirety.

CONCLUSIONS OF LAW

1. Mohave is an Arizona public service corporation within the meaning of Article XV, Section 2 of the Arizona Constitution, and an Affected Utility within the meaning of Title 14, Chapter 2, Article 18 of the Arizona Administrative Code.

2. The Commission has jurisdiction over Mohave and the subject matter of the Application.

3. It is reasonable and in the public interest to affirm Decision No. 72500 in its entirety.

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ORDER

IT IS THEREFORE ORDERED that Decision No. 72500 is hereby affirmed in its entirety.

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

CHAIRMAN

COMMISSIONER

COMMISSIONER

COMMISSIONER

COMMISSIONER

IN WITNESS WHEREOF, I, ERNEST G. JOHNSON,
Executive Director of the Arizona Corporation Commission,
have hereunto set my hand and caused the official seal of the
Commission to be affixed at the Capitol, in the City of Phoenix,
this _____ day of _____ 2012.

ERNEST G. JOHNSON
EXECUTIVE DIRECTOR

DISSENT _____

DISSENT _____

1 SERVICE LIST FOR: MOHAVE ELECTRIC COOPERATIVE, INC.

2 DOCKET NO.: E-01750A-10-0453

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